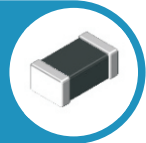




## Multilayer Chip Ferrite Beads - FBC Series



### Feature

- Wide range of frequency to suppress EMI.
- Wide range of impedance values for various applications.
- Internal silver printed layers and magnetic shielded structure.
- RoHS compliant.
- Operating temperature range -55°C ~ 125°C(Including self - temperature rise).

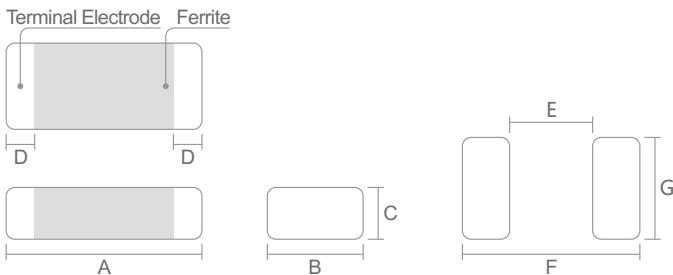
### Application

- High frequency EMI prevention of computers, printers, VCRs TVs and portable telephone.

### Production Identification

<b>FBC</b> Series name: High Current Ferrite Bead	<b>1005</b> Size: 1.0×0.5×0.5mm	—	<b>121</b> Impedance: 120Ω	<b>Y</b> Tolerance: ±25%
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### Series Shape and Dimensions (Unit:mm)



Series	A	B	C	D	E <sub>Typ</sub>	F <sub>Typ</sub>	G <sub>Typ</sub>
FBC1005	1.0±0.15	0.5±0.15	0.5±0.15	0.25±0.1	0.4	1.3	0.5
FBC1608	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2	0.7	1.8	0.8
FBC2012	2.0±0.2	1.25±0.2	0.85±0.2	0.5±0.3	1.0	2.6	1.2
FBC3216	3.2±0.2	1.6±0.2	1.1±0.2	0.5±0.3	2.0	4.2	1.6

## FBC1005 Electrical Characteristics

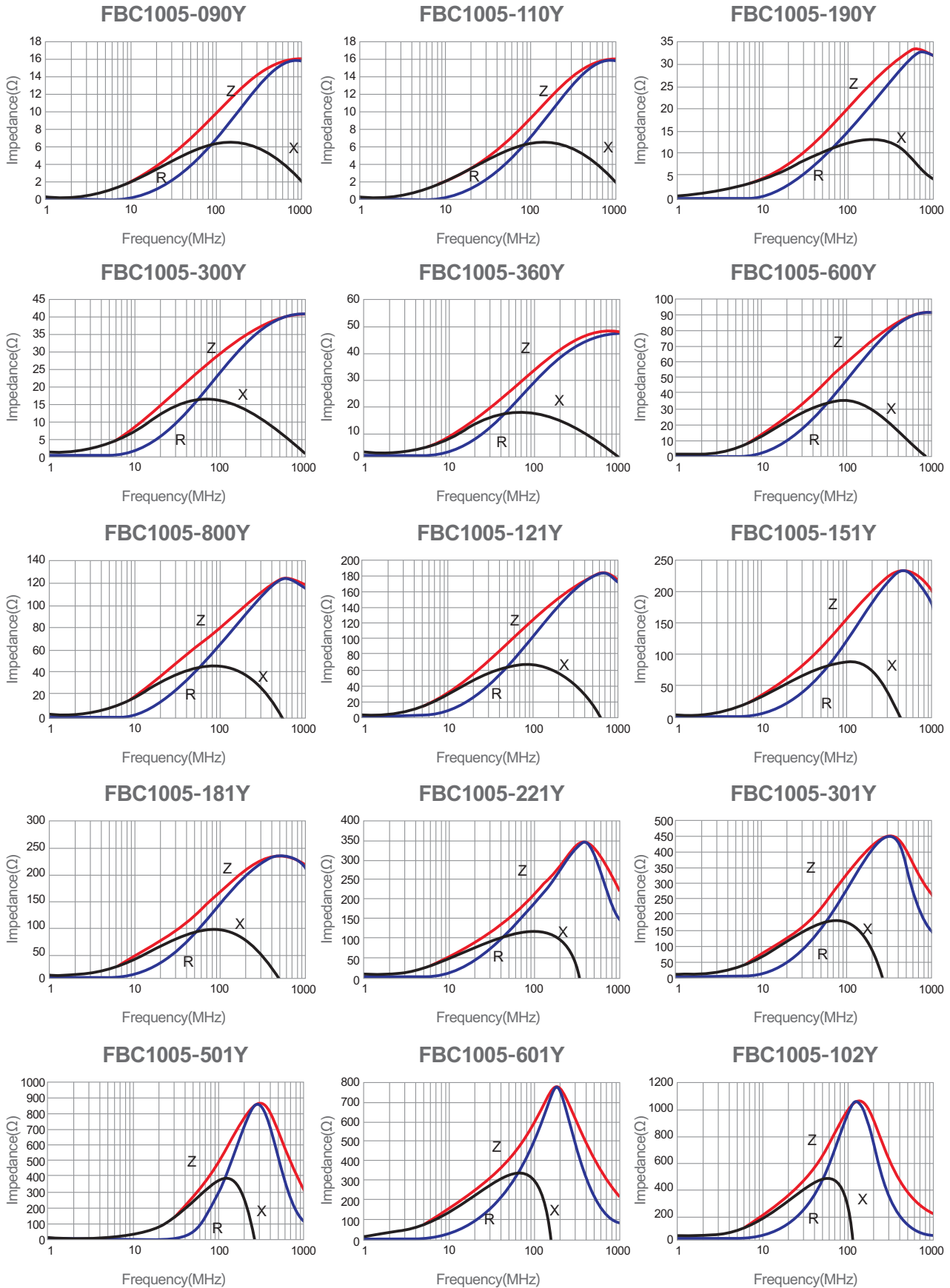
Part Number	Impedance ( $\Omega$ )	Tolerance	Test Freq. (MHz)	DCR Max ( $\Omega$ )	Current Max (A)
FBC1005-090Y	9	0-15 $\Omega$	100	0.04	0.80
FBC1005-110Y	11	0-15 $\Omega$	100	0.04	0.80
FBC1005-190Y	19	12-25 $\Omega$	100	0.06	0.70
FBC1005-300Y	30	$\pm 25\%$	100	0.08	0.70
FBC1005-360Y	36	$\pm 25\%$	100	0.15	0.60
FBC1005-600Y	60	$\pm 25\%$	100	0.15	0.60
FBC1005-800Y	80	$\pm 25\%$	100	0.20	0.45
FBC1005-121Y	120	$\pm 25\%$	100	0.25	0.45
FBC1005-151Y	150	$\pm 25\%$	100	0.25	0.45
FBC1005-181Y	180	$\pm 25\%$	100	0.40	0.30
FBC1005-221Y	220	$\pm 25\%$	100	0.40	0.30
FBC1005-301Y	300	$\pm 25\%$	100	0.50	0.30
FBC1005-501Y	500	$\pm 25\%$	100	0.65	0.20
FBC1005-601Y	600	$\pm 25\%$	100	0.70	0.20
FBC1005-102Y	1000	$\pm 25\%$	100	1.00	0.20

### Notes

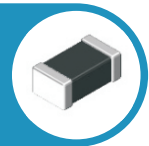
- Rated Current: Applied the current to chip bead, the temperature rise shall not be more than 30°C.
- Measuring Equipment: **Z**: HP4291A **RDC**: HP4338B or CHEN HWA 502



## Typical Impedance vs. Frequency Curves



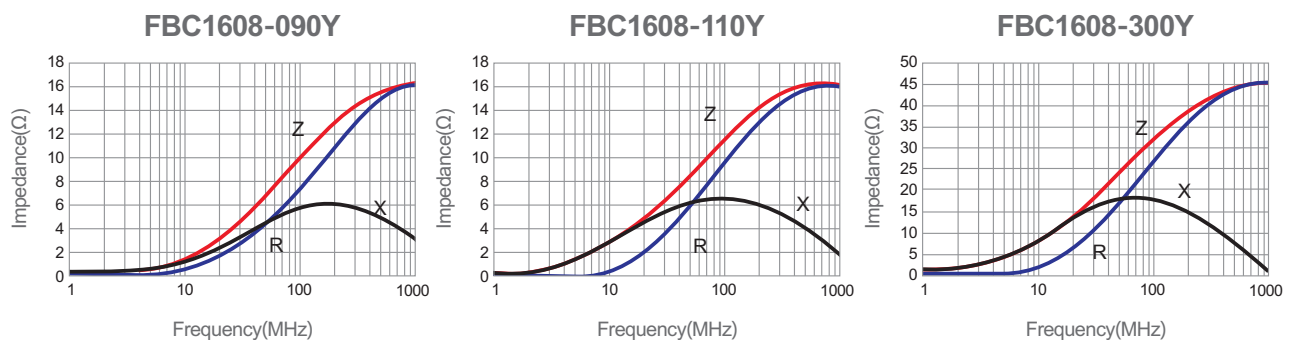
# Multilayer Chip Ferrite Beads - FBC Series



## FBC1608 Electrical Characteristics

Part Number	Impedance (Ω)	Tolerance	Test Freq. (MHz)	DCR Max (Ω)	Current Max (A)
FBC1608-090Y	9	0-15Ω	100	0.08	1.00
FBC1608-110Y	11	0-15Ω	100	0.08	1.00
FBC1608-300Y	30	±25%	100	0.08	1.00
FBC1608-600Y	60	±25%	100	0.12	1.00
FBC1608-800Y	80	±25%	100	0.20	1.00
FBC1608-101Y	100	±25%	100	0.20	1.00
FBC1608-121Y	120	±25%	100	0.20	1.00
FBC1608-151Y	150	±25%	100	0.25	1.00
FBC1608-181Y	180	±25%	100	0.25	1.00
FBC1608-221Y	220	±25%	100	0.30	1.00
FBC1608-301Y	300	±25%	100	0.30	1.00
FBC1608-501Y	500	±25%	100	0.40	1.00
FBC1608-601Y	600	±25%	100	0.40	1.00
FBC1608-102Y	1000	±25%	100	0.55	0.50
FBC1608-122Y	1200	±25%	100	0.65	0.50
FBC1608-152Y	1500	±25%	100	0.75	0.40
FBC1608-182Y	1800	±25%	100	0.80	0.40
FBC1608-202Y	2000	±25%	100	0.90	0.40

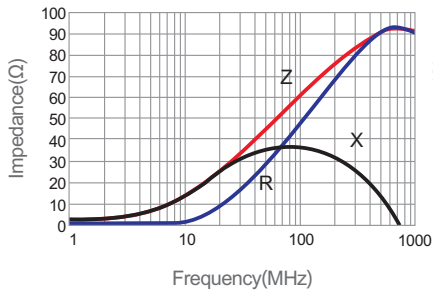
## Typical Impedance vs. Frequency Curves



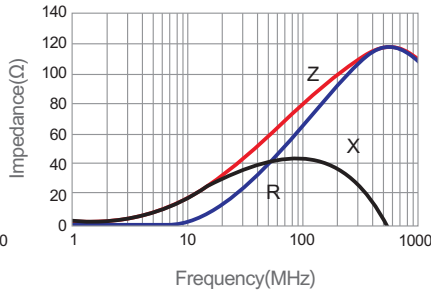


## Typical Impedance vs. Frequency Curves

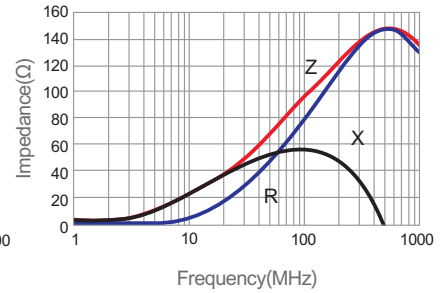
### FBC1608-600Y



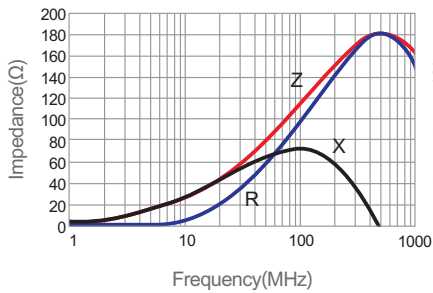
### FBC1608-800Y



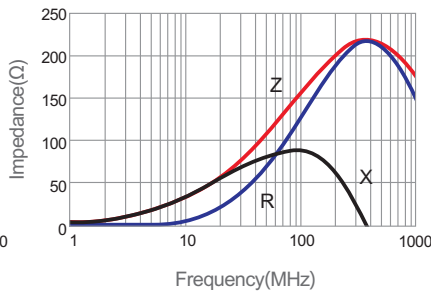
### FBC1608-101Y



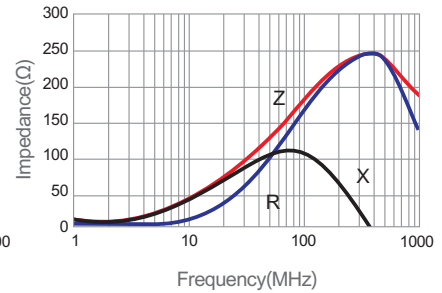
### FBC1608-121Y



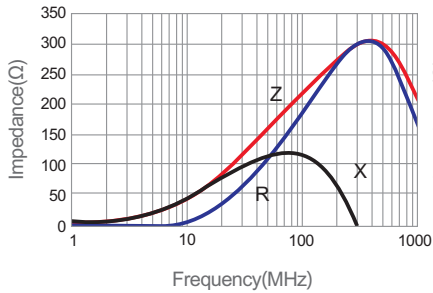
### FBC1608-151Y



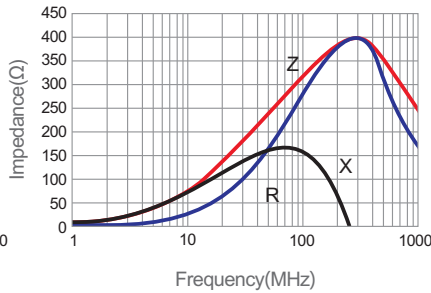
### FBC1608-181Y



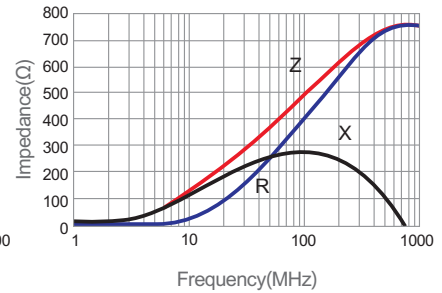
### FBC1608-221Y



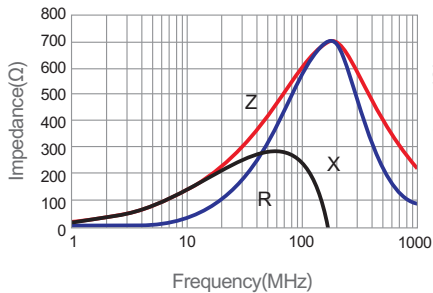
### FBC1608-301Y



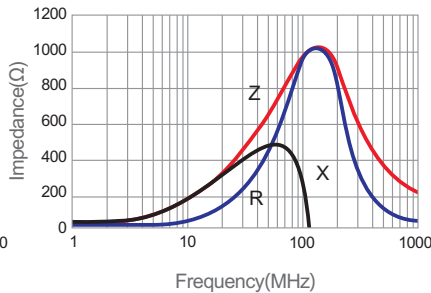
### FBC1608-501Y



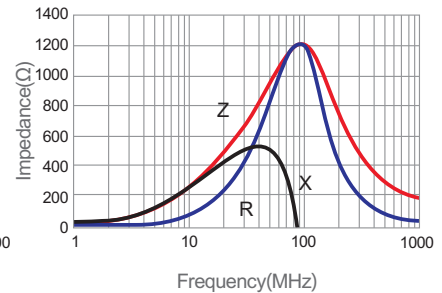
### FBC1608-601Y



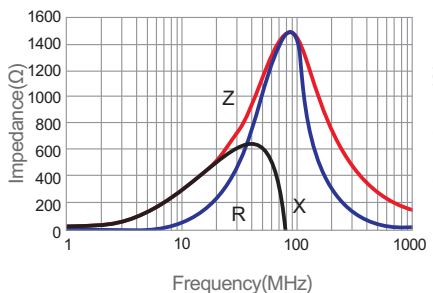
### FBC1608-102Y



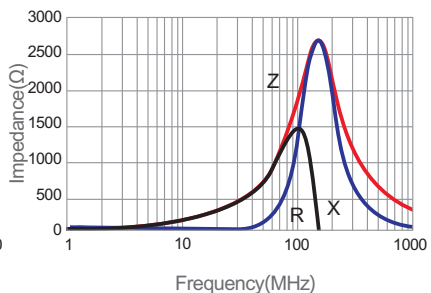
### FBC1608-122Y



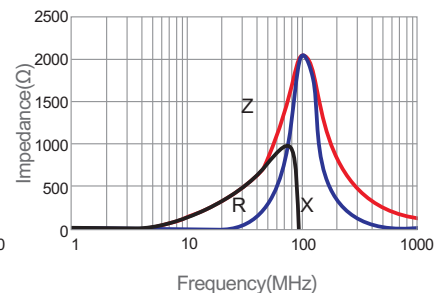
### FBC1608-152Y



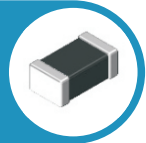
### FBC1608-182Y



### FBC1608-202Y



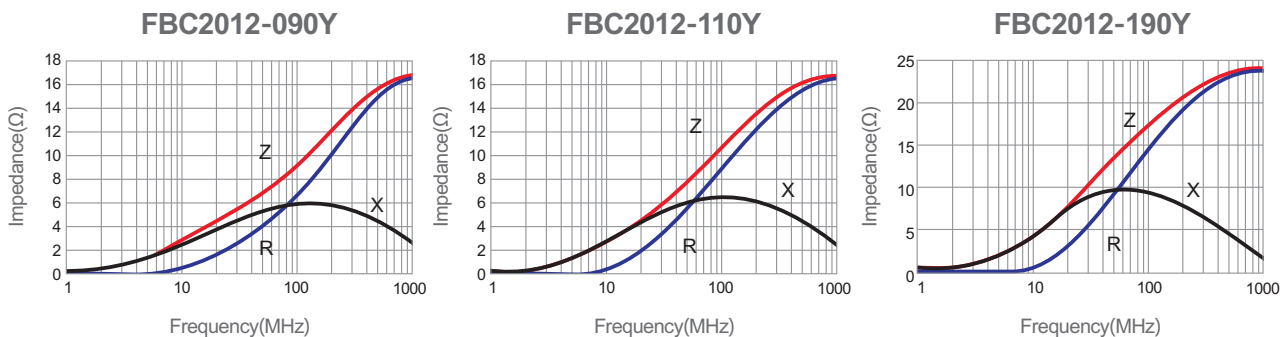
# Multilayer Chip Ferrite Beads - FBC Series



## FBC2012 Electrical Characteristics

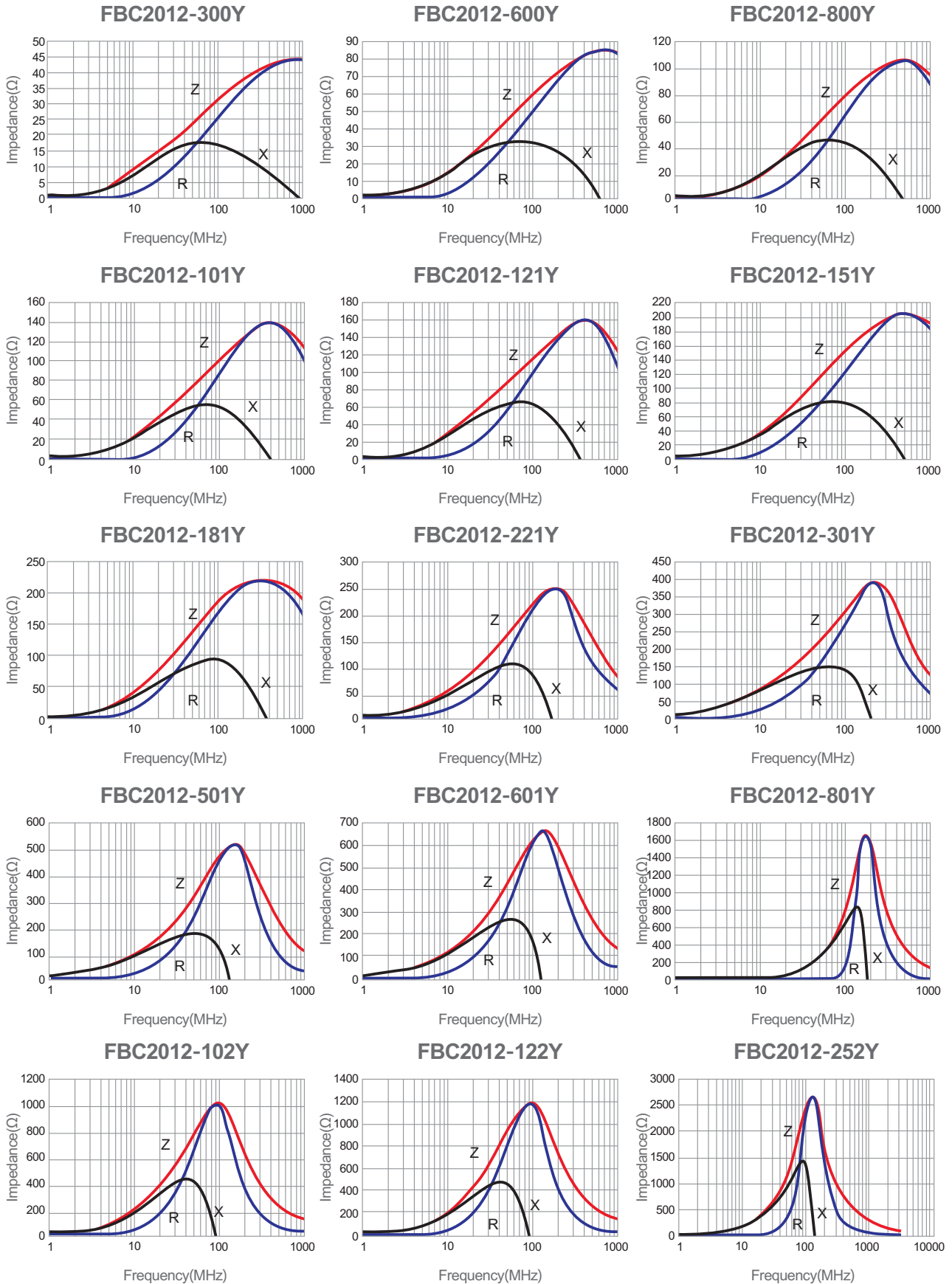
Part Number	Impedance (Ω)	Tolerance	Test Freq. (MHz)	DCR Max (Ω)	Current Max (A)
FBC2012-090Y	9	0-15Ω	100	0.03	3.00
FBC2012-110Y	11	0-15Ω	100	0.03	3.00
FBC2012-190Y	19	12-25Ω	100	0.03	3.00
FBC2012-300Y	30	±25%	100	0.05	3.00
FBC2012-600Y	60	±25%	100	0.06	3.00
FBC2012-800Y	80	±25%	100	0.08	2.50
FBC2012-101Y	100	±25%	100	0.10	2.50
FBC2012-121Y	120	±25%	100	0.10	2.00
FBC2012-151Y	150	±25%	100	0.10	2.00
FBC2012-181Y	180	±25%	100	0.15	2.00
FBC2012-221Y	220	±25%	100	0.15	2.00
FBC2012-301Y	300	±25%	100	0.20	2.00
FBC2012-501Y	500	±25%	100	0.25	1.50
FBC2012-601Y	600	±25%	100	0.25	1.50
FBC2012-801Y	800	±25%	100	0.30	0.80
FBC2012-102Y	1000	±25%	100	0.30	0.80
FBC2012-122Y	1200	±25%	100	0.45	0.50
FBC2012-252Y	2500	±25%	50	0.60	0.10

## Typical Impedance vs. Frequency Curves

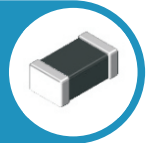




## Typical Impedance vs. Frequency Curves



## Multilayer Chip Ferrite Beads - FBC Series



### FBC3216 Electrical Characteristics

Part Number	Impedance ( $\Omega$ )	Tolerance	Test Freq. (MHz)	DCR Max ( $\Omega$ )	Current Max (A)
FBC3216-090Y	9	0-15 $\Omega$	100	0.05	4.00
FBC3216-110Y	11	0-15 $\Omega$	100	0.05	4.00
FBC3216-190Y	19	12-25 $\Omega$	100	0.05	3.00
FBC3216-300Y	30	$\pm 25\%$	100	0.07	3.00
FBC3216-600Y	60	$\pm 25\%$	100	0.10	3.00
FBC3216-800Y	80	$\pm 25\%$	100	0.10	3.00
FBC3216-101Y	100	$\pm 25\%$	100	0.10	3.00
FBC3216-121Y	120	$\pm 25\%$	100	0.10	3.00
FBC3216-151Y	150	$\pm 25\%$	100	0.15	2.50
FBC3216-181Y	180	$\pm 25\%$	100	0.20	2.50
FBC3216-221Y	220	$\pm 25\%$	100	0.20	2.50
FBC3216-301Y	300	$\pm 25\%$	100	0.20	2.00
FBC3216-501Y	500	$\pm 25\%$	100	0.20	2.00
FBC3216-601Y	600	$\pm 25\%$	100	0.25	2.00
FBC3216-801Y	800	$\pm 25\%$	100	0.25	2.00
FBC3216-102Y	1000	$\pm 25\%$	100	0.30	2.00
FBC3216-122Y	1200	$\pm 25\%$	100	0.35	1.00
FBC3216-152Y	1500	$\pm 25\%$	50	0.45	0.50
FBC3216-182Y	1800	$\pm 25\%$	50	0.60	0.50
FBC3216-202Y	2000	$\pm 25\%$	50	0.70	0.30

### Notes

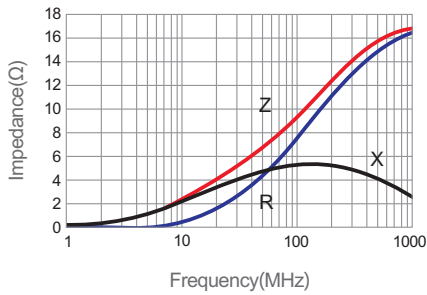
- Rated Current: Applied the current to chip bead, the temperature rise shall not be more than 30°C.
- Measuring Equipment: Z: HP4291A RDC: HP4338B or CHEN HWA 502



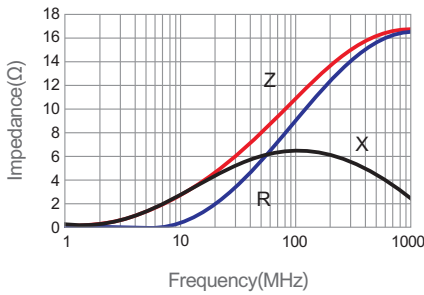


## Typical Impedance vs. Frequency Curves

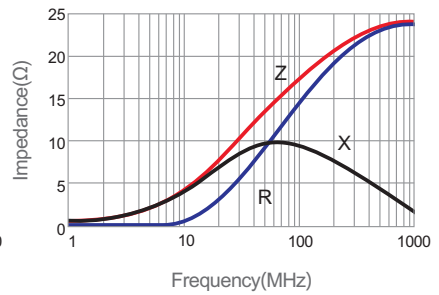
### FBC3216-090Y



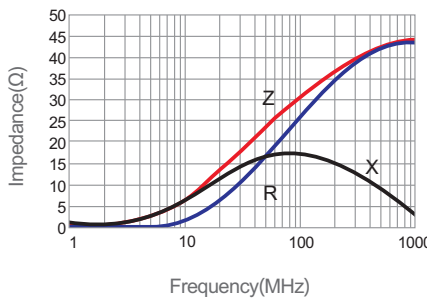
### FBC3216-110Y



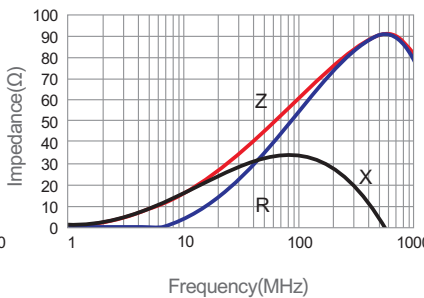
### FBC3216-190Y



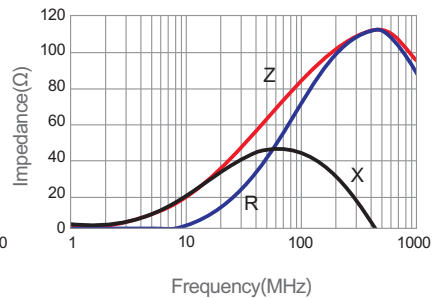
### FBC3216-300Y



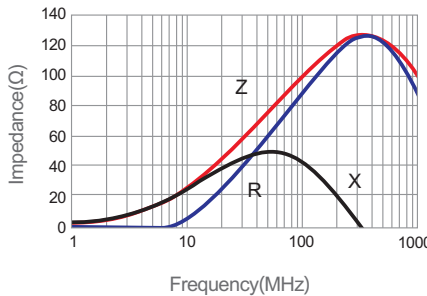
### FBC3216-600Y



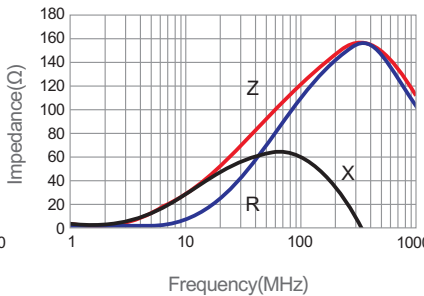
### FBC3216-800Y



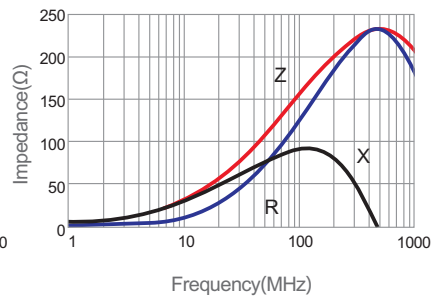
### FBC3216-101Y



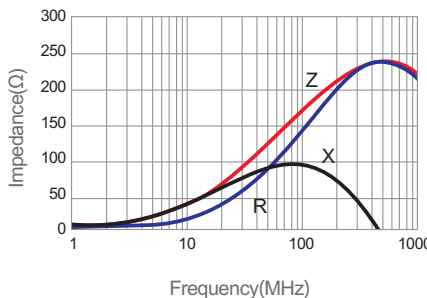
### FBC3216-121Y



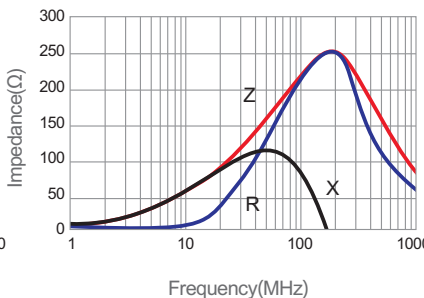
### FBC3216-151Y



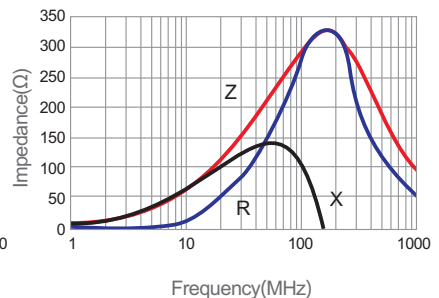
### FBC3216-181Y



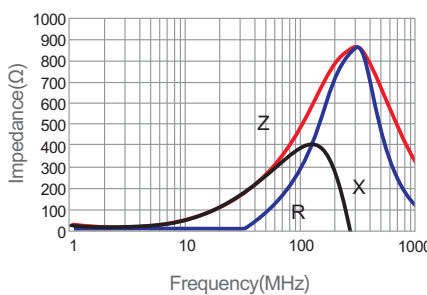
### FBC3216-221Y



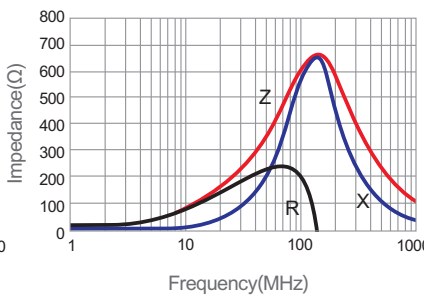
### FBC3216-301Y



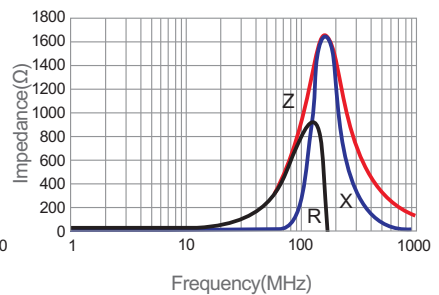
### FBC3216-501Y



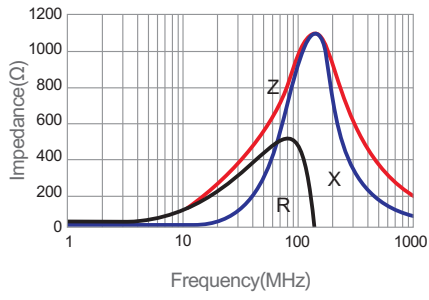
### FBC3216-601Y



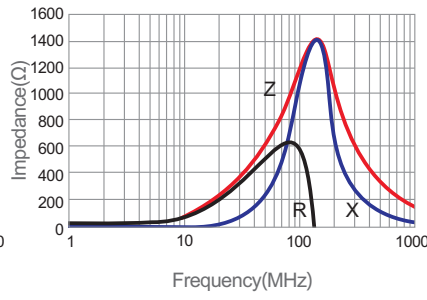
### FBC3216-801Y



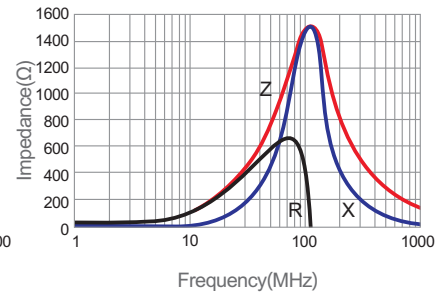
**FBC3216-102Y**



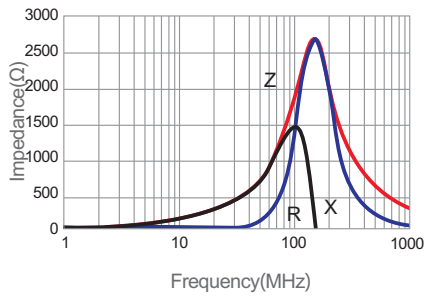
**FBC3216-122Y**



**FBC3216-152Y**



**FBC3216-182Y**



**FBC3216-202Y**

